

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM445131

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
Alexium, Inc.		09/28/2017	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	GPB Debt Holdings II, LLC, as agent		
<b>Street Address:</b>	535 West 24th Street, 4th Floor		
<b>City:</b>	New York		
<b>State/Country:</b>	NEW YORK		
<b>Postal Code:</b>	10011		
<b>Entity Type:</b>	Limited Liability Company: DELAWARE		
<b>PROPERTY NUMBERS Total: 5</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	5292687	ALEXICOOL	
<b>Registration Number:</b>	4899080	ALEXIUM	
<b>Registration Number:</b>	4899081	ALEXIFLAM	
<b>Registration Number:</b>	4899082	A	
<b>Registration Number:</b>	4254562	CLEANSHELL	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	2024083141		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Phone:</b>	202-408-3121 X62348		
<b>Email:</b>	jean.paterson@cscglobal.com		
<b>Correspondent Name:</b>	CSC		
<b>Address Line 1:</b>	1090 VERMONT AVENUE NW, SUITE 430		
<b>Address Line 4:</b>	WASHINGTON, D.C. 20005		
<b>ATTORNEY DOCKET NUMBER:</b>	841733		
<b>NAME OF SUBMITTER:</b>	Jean Paterson		
<b>SIGNATURE:</b>	/jep/		
<b>DATE SIGNED:</b>	09/29/2017		
<b>Total Attachments: 11</b>			

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, modified, supplemented, renewed, restated or replaced from time to time, this “**IP Security Agreement**”), dated as of September 28, 2017, is made by Alexium International Group, Ltd., a corporation organized under the laws of Australia (the “**Company**”), Alexium, Inc., a Delaware corporation and wholly owned subsidiary of the Corporation (“**Alexium USA**”), and Alexium Ltd., a corporation incorporated under the laws of Cyprus and wholly owned subsidiary of the Corporation (“**Alexium Cyprus**,” and, together with the Company and Alexium USA, collectively, the “**Grantors**”) in favor of GPB Debt Holdings II, LLC, in its capacity as collateral agent (the “**Collateral Agent**”) for itself as a Secured Party (as defined below) and any other Secured Party. All capitalized terms not otherwise defined herein (or as indicated herein as being defined in another document, agreement and/or instrument) shall have the meanings respectively ascribed thereto in the Security Agreement (as defined below).

WHEREAS, the Company and GPB Debt Holdings II, LLC (the “**Secured Party**”) are parties to that certain Securities Purchase Agreement, dated as of September 28, 2017 (the “**Purchase Agreement**”), pursuant to which the Company shall sell, and the Secured Parties shall have the right to purchase, Notes;

WHEREAS, it is a condition precedent to the purchase of the Notes under the Purchase Agreement that each Debtor has executed and delivered that certain Security Agreement, dated as of September 28, 2017, made by the Debtors to the Collateral Agent (as amended, modified, supplemented, renewed, restated or replaced from time to time, the “**Security Agreement**”); and

WHEREAS, under the terms of the Security Agreement, the Debtors have granted to the Collateral Agent, for the benefit of the Secured Party, a security interest in, among other property, certain intellectual property of the Debtors, and have agreed as a condition thereof to execute this IP Security Agreement for recording with the U.S. Patent and Trademark Office and the United States Copyright Office; and

NOW, THEREFORE, in consideration of the premises and the agreements herein and for such other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and in order to induce the Buyer to perform under the Purchase Agreement, each Debtor agrees with the Collateral Agent, for the benefit of the Noteholders, as follows

SECTION 1. Grant of Security. Each Debtor hereby grants to the Collateral Agent for the benefit of the Collateral Agent as a Noteholder and any other Noteholders a security interest in all of such Debtor’s right, title and interest in and to the following (the “**Intellectual Property Collateral**”):

- (i) the Patents and Patent applications set forth in Schedule A hereto;
- (ii) the Trademarks and service mark registrations and applications set forth in Schedule B hereto (provided that no security interest shall be granted in United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use

trademark applications under applicable federal law), together with the goodwill symbolized thereby;

(iii) all Copyrights, whether registered or unregistered, now owned or hereafter acquired by such Debtor, including, without limitation, the copyright registrations and applications and exclusive copyright licenses set forth in Schedule C hereto;

(iv) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Debtor accruing thereunder or pertaining thereto;

(v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

(vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Intellectual Property Collateral of or arising from any of the foregoing.

SECTION 2. Security for Obligations. The grant of a security interest in, the Intellectual Property Collateral under this IP Security Agreement by each Debtor) secures the payment of all Obligations of each Debtor now or hereafter existing under or in respect of the Notes and the other Transaction Documents, whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, redemption payments, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise.

SECTION 3. Recordation. Each Debtor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks and any other applicable government officer record this IP Security Agreement.

SECTION 4. Execution in Counterparts. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

SECTION 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Debtor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Intellectual Property Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein.

SECTION 6. Governing Law; Jurisdiction; Jury Trial.

(i) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the

State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.

(ii) Each Debtor hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or under any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim, defense or objection that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Collateral Agent or the Noteholders from bringing suit or taking other legal action against any Debtor in any other jurisdiction to collect on a Debtor's obligations or to enforce a judgment or other court ruling in favor of the Collateral Agent or a Noteholder.

(iii) WAIVER OF JURY TRIAL, ETC. EACH DEBTOR IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR UNDER ANY OTHER TRANSACTION DOCUMENT OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, ANY OTHER TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY.

(iv) Each Debtor irrevocably and unconditionally waives any right it may have to claim or recover in any legal action, suit or proceeding referred to in this Section any special, exemplary, indirect, incidental, punitive or consequential damages.

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IN WITNESS WHEREOF, each Debtor has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

DEBTORS:

**Alexium, Inc.**  
a Delaware corporation

By: Dirk L. Van Hyning  
Name: Dirk Van Hyning  
Title: CEO

**Alexium International Group, Ltd.**  
an Australian company

By: Dirk L. Van Hyning  
Name: Dirk Van Hyning  
Title: CEO

**Alexium, Ltd.**  
a Cyprus company

By: Dirk L. Van Hyning  
Name: Dirk Van Hyning  
Title: CEO

ACCEPTED BY:

**GPB Debt Holdings II, LLC,**  
as Collateral Agent

By: \_\_\_\_\_  
Name:  
Title:

IN WITNESS WHEREOF, each Debtor has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

DEBTORS:

**Alexium, Inc.**  
a Delaware corporation

By: \_\_\_\_\_  
Name:  
Title:

**Alexium International Group, Ltd.**  
an Australian company

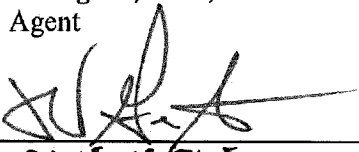
By: \_\_\_\_\_  
Name:  
Title:

**Alexium, Ltd.**  
a Cyprus company

By: \_\_\_\_\_  
Name:  
Title:

ACCEPTED BY:

**GPB Debt Holdings II, LLC,**  
as Collateral Agent

By:   
Name: DAVE GENTILE  
Title: MANAGER

**Schedule A**  
**Patents, Etc.**


**Alexium, Inc. Patents**



Country	Title	Filing Date	Application or Publication #	Status
US	Emulsification of Hydrophobic Organophosphorus Compounds	5/28/2015	2015-0353833	Pending
TW	Emulsification of Hydrophobic Organophosphorus Compounds	6/9/2015	201605950	Pending
AU	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	2015273150	Pending
BR	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	1120160288475	Pending
CA	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	2951362	Pending
CN	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	106659998	Pending
IN	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	201717000695	Pending
MX	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	MX/a/2016/016235	Pending
EP	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	3154670	Pending
VN	Emulsification of Hydrophobic Organophosphorus Compounds	5/29/2015	1-2017-00058	Pending




**Schedule B**  
**Trademarks**

## Alexium, Inc. Trademarks

JURISDICTION	TRADEMARK	GOODS	APP. NO. APP. DATE	REG. NO. REG. DATE	STATUS
Australia		<b>Cl. 1</b> chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles	1840525 Apr. 26, 2017		Pending
Australia	ALEXIFLAM	<b>Cl. 1</b> chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and chemical agents for impregnating binding, or coating of textiles	1838858 Apr. 18, 2017		Pending
Australia	ALEXIUM	<b>Cl. 1</b> chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles	1838859 Apr. 18, 2017		Pending
Australia	ALEXICOOL	<b>Cl. 1</b> chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles	1830897 Mar. 9, 2017	1830897 Mar. 9, 2017	Registered
China	ALEXIUM	<b>Computerized Translation:</b> Textile industry with pulp; flame retardants; industrial chemicals; textile industry rinse; textile impregnated chemicals; printing and dyeing finishing agent; non-medical, non veterinary chemical reagents <b>Subclass Description:</b> 0104 Chemical preparations used in industry, science; including those which not belong to other classes 0110 Fire extinguishing compositions 0106 Chemical preparations	23937796 May 4, 2017		Unpublished, pending
China	ALEXICOOL	<b>Computerized Translation:</b> Industrial chemicals; textile industry with the slurry; printing and dyeing finishing agent; flame retardants; textile industry rinse; textile impregnated chemicals; non-medical, non veterinary chemical reagents <b>Subclass Description:</b>	23937794 May 4, 2017		Unpublished, pending

JURISDICTION	TRADEMARK	GOODS	APP. NO. APP. DATE	REG. NO. REG. DATE	STATUS
		0104 Chemical preparations used in industry, science; including those which not belong to other classes 0110 Fire extinguishing compositions 0106 Chemical preparations			
China	ALEXIFLAM	<b>Computerized Translation:</b> Textile industry with the pulp; textile industry rinse; textile impregnated chemicals; printing and dyeing finishing agent; flame retardant; non-medical, non veterinary chemical reagents; industrial chemicals <b>Subclass Description:</b> 0104 Chemical preparations used in industry, science; including those which not belong to other classes 0110 Fire extinguishing compositions 0106 Chemical preparations	23937797 May 4, 2017		Unpublished, pending
China		<b>Computerized Translation:</b> Textile dipping chemicals; textile industry with pulp; textile industry with rinse; printing and dyeing finishing agent; non-medical, non veterinary chemical reagents; industrial chemicals; <b>Subclass Description:</b> 0104 Chemical preparations used in industry, science; including those which not belong to other classes 0106 Chemical preparations 0110 Fire extinguishing compositions	23937795 May 4, 2017		Unpublished, pending
European Union		<b>Cl. 1</b> chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles.	16647497 Apr. 27, 2017	16647497 Aug. 25, 2017	Registered
European Union	ALEXIFLAM	<b>Cl. 1</b> chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and chemical agents for impregnating binding, or coating of textiles	16615007 Apr. 19, 2017	16615007 Aug. 16, 2017	Registered

JURISDICTION	TRADEMARK	GOODS	APP. NO. APP. DATE	REG. NO. REG. DATE	STATUS
European Union	ALEXIUM	Cl. 1 chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles	16615056 Apr. 19, 2017	16615056 Aug. 18, 2017	Registered
European Union	ALEXICOOL	Cl. 1 chemical substances, chemical materials and chemical preparations; chemical and organic compositions and substances for treatment of leather and textile; chemicals for the treatment of fabrics; chemicals for impregnating textiles; chemical compositions for finishing textiles; chemical compositions for treating textiles; chemical treatments, namely chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles	16464356 Mar. 14, 2017	16464356 Jul. 7, 2017	Registered
United States	ALEXICOOL	Cl. 1 chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles	87173383 Sept. 16, 2016	5292687 Sept. 19, 2017	Registered
United States	ALEXIUM	Cl. 1 chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles	86256083 Apr. 18, 2014	4899080 Feb. 9, 2016	Registered
United States	ALEXIFLAM	Cl. 1 chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and chemical agents for impregnating, binding, or coating of textiles	86256109 Apr. 18, 2014	4899081 Feb. 9, 2016	Registered
United States		Cl. 1 chemical treatments, namely, chemical agents for impregnating, binding, coating or surface treating of textiles and non-textiles; chemical treatments, namely, chemical agents for the flame-retardant treatment of textiles and non-textiles	86256114 Apr. 18, 2014	4899082 Feb. 9, 2016	Registered
United States	CLEANSHELL	Cl. 24 fabrics, namely, liquid repellent fabrics, flame retardant fabrics, fabrics having insect repellency, fabrics that are uv stable, and/or fabrics that provide protection against biological agents; all for garments, clothing and clothing accessories	85260099 Mar. 7, 2011	4254562 Dec. 4, 2012	Registered

**Schedule C**  
**Copyrights**